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DIRECTOR

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Conrad T. Spangler, III, Division Director

October 5, 2007

Chief, Rulemaking, Directives, and Editing Branch
Mail Stop T-6D59
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

RE: Generic Environmental Impact Statement for Uranium Milling Facilities

Dear Sir:

Thank you for the opportunity to comment on your Notice of Intent to prepare a Generic Environmental Impact Statement (GEIS) for Uranium Milling Facilities, which you published in the August 31, 2007 Federal Register. The purpose of the GEIS is to assess the potential environmental impacts associated with uranium recovery at milling facilities employing the in-situ leach (ISL) process. You indicate that the GEIS may also assess the potential impacts of alternative methods of uranium recovery (including the conventional milling process). The notice states that NRC is expecting numerous license applications for ISL uranium milling facilities in the coming 2-3 years, and that the GEIS will address the common issues associated with environmental reviews of such milling facilities located in the western United States.

If you are not aware, a rather large source of uranium is reported to be located in south-central Virginia near Chatham. A local company, Virginia Uranium, Inc. has been formed for the purpose of mining and milling the uranium. According to Virginia Uranium, it intends to immediately seek permits to explore the area further, and assuming Virginia allows mining and milling to occur, Virginia Uranium hopes to see development within about 10 years. The company intends to explore all mining techniques to recover the mineral, including open-pit and underground methods and the ISL process. Enclosed is a recent article that describes the intentions of Virginia Uranium, Inc. in uranium recovery at the Chatham site.

Because of the interest in uranium mining and milling in Virginia, we recommend that the scope of the GEIS be expanded to consider the potential environmental impacts of uranium recovery using the ISL process in the eastern United States as well as the west. Also, should the GEIS assess the potential environmental impacts of other methods of uranium recovery, including the conventional milling process, we recommend that the assessment include the eastern United States.

If you have any questions about this, or we can provide you with any information or assistance with the GEIS, please let me know.

Sincerely,

Conrad T. Spangler, III

Enclosure

http://www.wpcva.com/articles/2007/10/03/chatham/news/news30.txt

Local company hopes to mine uranium

By TIM DAVIS, Star-Tribune Editor

A locally owned and managed company, Virginia Uranium Inc., has been formed to mine and mill a huge uranium deposit in Pittsylvania County if, according to the company's chairman, Walter Coles, it can be done safely. Virginia Uranium Inc. was formed by the Coles and Bowen families, who own the land where the richest uranium deposit in the United States was discovered 25 years ago. The deposit is on Coles Road between Chalk Level and South Meadows roads in the Sonans and Sheva communities, about six miles northeast of Chatham. It includes two ore bodies and an estimated 110 million pounds of uranium worth at least $10 billion. The northern ore body is on Coles' land; the southern ore body is on both the Coles' and Bowens' land. Virginia Uranium hopes to convince the General Assembly to adopt a study resolution on uranium mining and milling early next year. If, after studying the issue, the state determines uranium can be mined safely, Coles hopes Virginia will lift its moratorium on uranium mining, possibly as early as 2009. It would still take about two years to develop the legal and regulatory framework for uranium mining, he said.

Virginia Uranium Inc.

Walter Coles, who lives at Coles Hill, his family's historic home near the deposit, is chairman of Virginia Uranium Inc. He and his sister, Sarah Coles McBrayer of Norfolk, have a 50-50 stake in the ore on their land. The Bowen family includes five brothers and sisters, most of whom are local, and is represented by Henry Bowen of Sheva, who is on Virginia Uranium's board of directors. Other directors - all chosen for their business and financial experience - include Gregory Beard, Peter Grosskopf, Ronald Netolitzky, and Harvey Roberts. Virginia Uranium's president and chief executive officer is Norm Reynolds of Chatham, the former president of Marline Uranium Corp., which announced the discovery of uranium in 1982. The company is raising start-up funds, and the venture has attracted a number of local investors or "stakeholders," as Coles describes them. Coles has been quietly holding "town hall meetings" with neighbors for the past few months to inform them about the proposed project. "We've very much tried to make this a bottom-up approach and gain support from the community," he said. Virginia Uranium hopes to raise $10 million to $20 million in start-up funds from individual and institutional investors, Coles said. Eventually, according to the chairman, the company plans to offer stock to the public, which means anyone could invest in the potential uranium mining and milling operation.

Coles Hill

Coles' family has owned the land at historic Coles Hill since 1785. The house was built in 1810 and the farm originally included 5,500 acres. The family raised tobacco, wheat, and cattle. "A Coles has always lived here. I'm the fifth," said Coles. "That's the reason I'm very careful about what happens here." Coles was born and raised at Coles Hill, but left to attend Fork Union Military Academy and later graduated from The Citadel, the prestigious military college in Charleston, S.C. He served two tours in Vietnam, rising to the rank of captain before leaving the Army to join the U.S. Agency for International Development, an arm of the State Department, in 1969. Coles later returned to Vietnam where he spent the next six years working with the military's civilian pacification efforts. He was on the last plane that left Saigon when the South Vietnamese capital fell in 1975. All together, Coles spent 33 years in the military and foreign service. He has lived and worked all over the world - Asia, Jordan, Egypt,

Jamaica -but often returned to Coles Hill between postings to help his late father harvest crops, and to hunt and enjoy the land. "I loved it," Coles said. "I always knew I would return here. I thought I'd never leave." Coles retired from the foreign service in 1999 and spent five years as an international consultant on land reform and privatization. His last consultant trip was in Afghanistan. He retired for good in 2004 and moved back to Coles Hill several years ago. His wife, Alice Clement Coles, still works with the State Department and plans to retire in December. Her brother is former delegate and Virginia transportation secretary Whitt Clement.

Renewed interest in uranium deposit

The Coles Hill uranium deposit had been pretty much forgotten for the past 25 years, but as the price for uranium began climbing, speculators and eventually large companies showed renewed interest in the deposit. Coles said he was first approached several years ago by an Arizona state legislator who had read a comprehensive report on the uranium deposit by Virginia Tech. He basically showed up on Coles' doorstep one day and wanted to lease the land. At that time, uranium was selling for $25 to $30 a pound. "I didn't give a lot of attention to it," Coles said, "but I knew I didn't want to do it the way he wanted to do it, which was to lease it, manage it, and control it." The next year, as the price of uranium climbed to $35 a pound and higher, others began showing up. "As the price got up a little higher, they became more aggressive," Coles said. "Others began to come and began offering large sums of money – huge sums. The interest became overwhelming." Eventually, Cameco, a large Canadian conglomerate, invited Coles and a neighbor to visit its underground mine and milling operation in Saskatchewan. Cameco, one of the world's largest producers of uranium, wanted an exclusive agreement to control all rights to the Coles Hill deposit for three years, followed by a negotiated agreement. "We weren't going to sell out," Coles said.

Company formed

Eventually, Coles decided to form his own company to explore the possibility of mining uranium. "If these folks can come in and form a company, why couldn't the Coles family do it?" he said. For help, he turned to his son, Walter Coles Jr., an investment banker in New York who had worked in the energy sector as an analyst. They first approached investment bankers in New York, but they weren't interested. U.S. investors fled the nuclear industry in droves when the bottom fell out of the market in the 1980s, pretty much halting any new development in the United States. Canada, however, continued to expand its nuclear energy programs, so in 2006 Coles turned to Canadian investment banks, which agreed to help with financing. He founded Virginia Uranium Inc. in 2006. "It's a Virginia company - Virginia owned and Virginia managed," said Coles. The challenge then became to find Virginians who had the expertise the company needed, he said. Coles approached Norm Reynolds, who left Marline in 1986 but remained in Chatham, where he started North American Locating, an underground utilities company. Reynolds sold the company in 2004. Reynolds was impressed with Coles' Virginia-owned and Virginia-managed philosophy. "It's a fabulous idea because here is a local company with local individuals who have passion and stewardship of the land and environment," said Reynolds. Joe Aylor, a Gretna native, is Virginia Uranium's chief geologist. Aylor has
a doctorate in geology and was working in Delaware when approached by Coles. Virginia Uranium also hired Jenny Cole, a geologist from Alaska who recently moved to the Sheva community. Cole has family in the county. The company's public and investment relations person, Ashley Gendron, is from Martinsville. Coles' son is Virginia Uranium's executive vice president of corporate development and investor relations.
Joseph Kiely is the company's chief financial officer and Mick Mastilovic is vice president of operations. Mastilovic lives next door to Reynolds. In information prepared for investors, Virginia Uranium said the company is "dedicated to the highest principles of environmental safety, sound economic development, and the well being of the community

and region." Seven "guiding principles" form the basis of the company's philosophy: energy independence, community development, conservation, historic preservation, agricultural traditions, regulatory benchmarks, and local stakeholders. (See related story.)

History

Marline Uranium Corp., a subsidiary of Marline Oil Company, first began looking for uranium in Virginia in 1977. Prospectors targeted Pittsylvania County based on the area's geology, said Reynolds, and literally drove up and down roads armed with sophisticated Geiger counters to measure radiation. On Coles Road, prospectors picked up rocks in a ditch which showed a higher than normal level of radioactivity, and, from there, zeroed in on what would prove to be one of the largest undeveloped uranium deposits in North America. Reynolds said the discovery involved a bit of luck because radiation doesn't travel very far. "Twenty-five feet off the deposit, you can't find radioactivity," he said. The Coles Hill deposit, which comes right to the surface of the land and straddles the road, is second only to Cameco's Athabasca Basin deposit in northern Canada, which produces 25 percent of the world's uranium. "It was a major discovery," said Reynolds, a young geologist and vice president with Marline at the time. "It was like being in the Super Bowl or the World Series as a rookie." Marline began acquiring mineral leases in the county in 1978 and started test drilling in 1979. The company drilled 210 holes, going down as far as 1,000 feet, to define the deposit. "The size blew us away," said Reynolds. Marline announced its uranium discovery in 1982 and formed a partnership with Union Carbide to mine and mill the Coles Hill deposit. A year later, Virginia established the Uranium Administration Group to design a framework for permitting uranium mining. The Virginia Coal and Energy Commission concluded that uranium mining could proceed if certain recommendations were enacted into law in 1984. However, stiff opposition, mainly from environmental groups, slowed the project, and eventually led to a moratorium. Several years later, a sharp drop in the price of uranium - from $40 a pound when the discovery was made to $9 a pound - forced Marline to suspend the project. When the price didn't rebound, the company abandoned the project altogether in 1989 and the mineral rights returned to Coles and Bowen. According to Reynolds, Marline and Union Carbide spent about $42 million on the Coles Hill project.

Nuclear energy rebounds

As the demand for energy grew, the nuclear industry experienced a resurgence, and the price of uranium began to inch back up, reaching a peak of about $135 a pound. Today, it's hovering around $85 a pound. "I knew it would come around again," said Reynolds. "It is a major energy resource. I just knew this project had to come back." Both Coles and Reynolds believe nuclear energy is an important part of the United States' overall energy plan, and said uranium mining will enhance the goal toward energy independence and security. About 4.3 million pounds of uranium will be produced domestically in 2007, while U.S. nuclear reactors are expected to use 67 million pounds. That means the U.S. will have to buy most of its uranium from foreign countries. "Energy exploration and development is controversial, but you need it," Reynolds said. "I'd like a world where we didn't have to have oil wells and coal mines and uranium mines. But as the same time I want to be able to turn on the light switch and drive an automobile."

Moratorium

Before uranium can be mined in Virginia, the General Assembly will have to lift a moratorium that has been in place since the early 1980s. Virginia Uranium hopes to convince the legislature to adopt a study resolution on uranium mining possibly as early as the 2008 session. " We want to do the necessary research to see if it can be done safely," said Coles. The state would build on what the Coal and Energy Commission did 25

years ago, and spend at least a year studying the issue, holding public meetings, and drafting a legal and regulatory framework for uranium mining. The company hopes to have the moratorium lifted and proceed with a permit for the mining operation in 2009 or 2010. Virginia already allows uranium exploration, and Coles said the company plans to immediately seek permits for test drilling to confirm Marline's 25-year-old discovery for investors.

Virginia Energy Plan

A Virginia Energy Plan released last month noted there is "a renewed interest in uranium exploration and mining due to rising uranium prices," and cited the Coles Hill deposit. "Initial environmental and land-use studies that evaluated the impact of the project found that surface and groundwater impact would be minimal. No significant deep, regional aquifers were identified in the area of the deposit," the report said. Many uranium mining activities are controlled by federal law and regulations, including the Uranium Mill Tailings Radiation Control Act of 1978, Safe Drinking Water Act, Underground Injection Control Program, and National Emission Standards for Hazardous Air Pollutants. The Nuclear Regulatory Commission controls the licensing of uranium-processing mills and disposal of mill tailings. "The commonwealth would need to develop operational and reclamation requirements for uranium mining and milling before the moratorium on extraction could be lifted," the plan noted. "Any development would have to be carefully designed, developed, and monitored to ensure that the operation would not affect surface and groundwater."

Mining and milling

Even if the state lifts its moratorium on uranium mining, it could take about 10 years to start the mining and milling operation. According to Reynolds, it will cost $30 million to design the mine and mill, and $500 million to $750 million to build the facility. The mill is expected to be about a mile from the mine and likely will be sited on the former Coy Frith farm, which Coles recently purchased. Coles already controls about 1,500 acres around the proposed mine. Construction would take about two years, with the mine and mill eventually employing 400 to 700 people. Based on the size of the known deposit, the operation would last 30 to 40 years. There are three ways to mine uranium - open pit, underground, and in situ. The latter involves injecting water and chemicals into the ground to force out the uranium. Although it is the most environmental friendly form of mining, earlier studies by Marline indicated the geology of the Coles Hill deposit may not be suitable for an in situ operation. Coles said Virginia Uranium plans to look at all three types of mining. If the company uses the open-pit method, Reynolds said the mine will likely be about 100 acres in size and up to 850 feet deep. The operation may also involve underground mining. In an open pit, ore is scooped up by large excavators, loaded into dump trucks, and taken to the mill, where the stone is crushed to extract the uranium. The uranium, or yellow cake, would be packed in drums and shipped by truck to a conversion plant, where it would be converted to uranium hexafluoride, an intermediate product in the manufacture of nuclear fuel for reactors. From there, it goes to an enrichment plant, where it is enriched and transformed into uranium oxide and compressed into small pellets that are loaded into long metallic tubes, or fuel rods. What's left at the mill after the rock is crushed is a sand-like substance called uranium "tailings." Tailings, which remain radioactive even after the uranium has been removed, would be stored above ground until the mine is exhausted, then possibly put back in the pit, with rock and clay forming a natural container much like the land does today.

Environmental safeguards

Coles, whose home is about 500 yards from the proposed mine, is hopeful uranium can be safely mined and milled. "There's a lot of new technology," he said. "And since I'm

going to live here, I've got a great interest in making sure it's done right and safely." Coles has visited several uranium mining and milling operations, including, most recently, one in Saskatchewan, Canada. Owned and operated by the French firm Areva, the operation had a huge water treatment plant to treat all water used in the milling operation. In addition, the uranium mine and mill are ringed by monitoring wells to track any potential migration of radioactive waste. Community groups keep an eye on the wells. Coles has already placed his family's historic home and the land surrounding it in a protected area. "The land and house are protected from any sort of development by outsiders for 100 years," he said. "I expect to live here through my lifetime, and my heirs to live here as well." In addition, Virginia Uranium plans to establish legal agreements to protect the environment and reclaim the land. "We're going to have financial resources set aside so that if anything happens, the land and people will be protected first," said Coles. "I personally insisted on that because I want my heirs to live here and love the land as I do. So this operation has to meet my very high standards."

Enlisting support

Coles has been meeting with local and state officials as well as environmental groups like the Southern Environmental Law Center in Charlottesville and Piedmont Environmental Council in Warrenton. Both were bitterly opposed to uranium mining 25 years ago. "We brought it to them and told them what we were going to do," said Coles. "We made it as transparent as possible. The reception has been cordial. They are willing to debate and talk about the issues." In a statement posted on its website last month, however, the Southern Environmental Law Center promised to be an advocate for ensuring that Virginia keeps the ban on uranium mining. "Uranium mining in the U.S. and around the world has resulted in a host of serious, long-term problems, including toxic and radioactive contamination of groundwater and surface water, and risk of cancer and other health problems for workers and the public," the law center said. "Virginia should keep the ban on uranium mining. Too many questions remain about whether the natural resources and public health of the commonwealth can be fully and forever protected." Reynolds said many of the horror stories surrounding uranium mining come from when mining and production first began in the 1940s and 50s when there was very little concern for health and the environment. "Modern operations and modern mills are well designed with safety features," he said. "It's probably safer than most industrial complexes. We're dealing with something that's already part of the natural environment." Reynolds said radiation is everywhere, and studies have shown that typical exposure at a uranium mine is about the equivalent of half an x-ray a year. Most people get much more radiation from the sun, he added.

Community benefits

Coles said the uranium mine and mill would be a catalyst for economic development throughout the region. "By controlling it and having ownership local, we can undertake initiatives that would have greater benefit to the community," he said. "We can use the resources in a way that is responsible." In addition to the jobs the project would create, Virginia Uranium plans to propose a 4 percent tax on its mining and milling operation, with revenue going to Pittsylvania County, Halifax County, and Henry County. According to Coles, 1 percent of the tax might be designated to pay school debt, one percent for roads, and 2 percent for environmental and conservation initiatives. Coles' close friend, Henry Hurt, a retired Reader's Digest editor who operates Shadetree Rare Books on Main Street in Chatham, is so excited about the project's potential he put his own money into Virginia Uranium. "It's an astonishing opportunity for this region," said Hurt. "This is not a company propped up by government grants and stipends.... It's people risking their own money to make it work. "Anybody will be able to buy stock in this company in the future," Hurt said. "That's a great thing. When was the last time we had a

company crank up and go public in this region? It's exciting." Hurt admitted he had "lingering" questions about uranium mining 25 years ago, but noted there have been substantial advances and more sophisticated ways to deal with the tailings. "There have been notable and significant advances in every area," he said. "It makes a big difference to me."

Del. Robert Hurt

Henry Hurt's son, Del. Robert Hurt, is running for the Virginia Senate in the November election. The two have discussed the project, but the legislator said he plans to weigh all of the concerns and considerations. "I have talked to both sides," said Hurt. "I believe it would be irresponsible not to look at it, but if I'm not convinced it can be done safely, then I will be adamantly against it. There's just way too much to learn, so I'm going to keep an open mind." Hurt said his father's connection to Virginia Uranium has no bearing on his decision. "My father's involvement has absolutely no influence on how I carry out my duties to my constituents," the lawmaker said.

Community support

Henry Bowen, whose family owns the land where part of the huge deposit was found, said local ownership and management of the uranium mining operation is important to him. He thinks it will be important to the community as well. "It makes a difference to me because we have control over this operation," said Bowen. Bowen has concerns about uranium mining, but said people need answers to make a reasonable decision. "Based on the information we have, I can't say this is what we ought to do," he said. "But I feel like there have been technological advances and it can be worked out. "We want to work with the community on this project. Their concerns are my concerns," said Bowen.